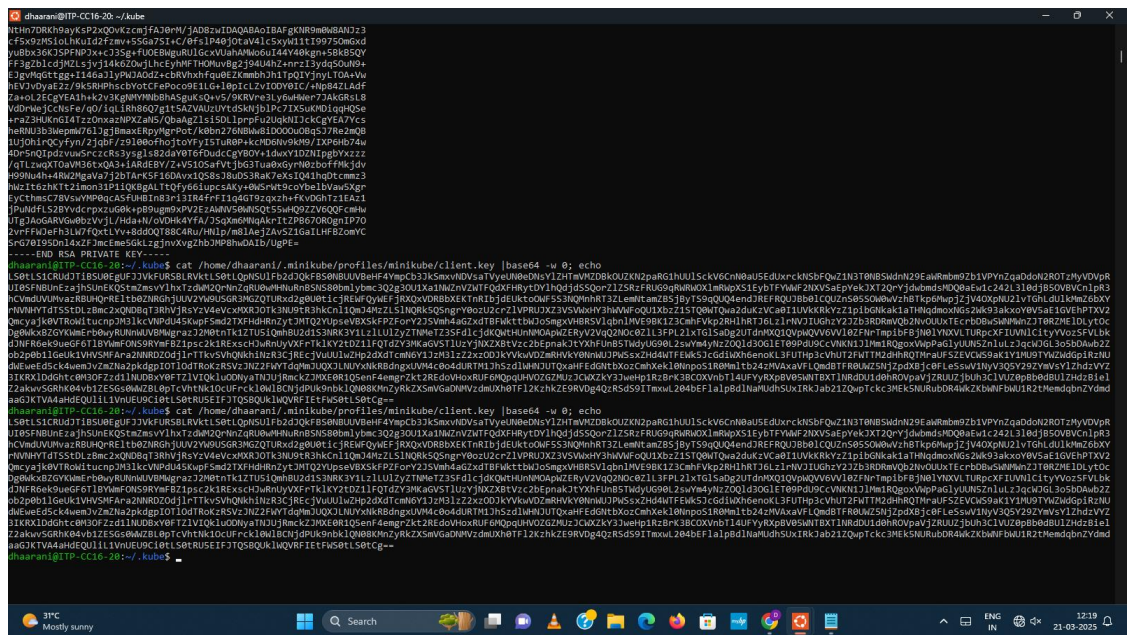
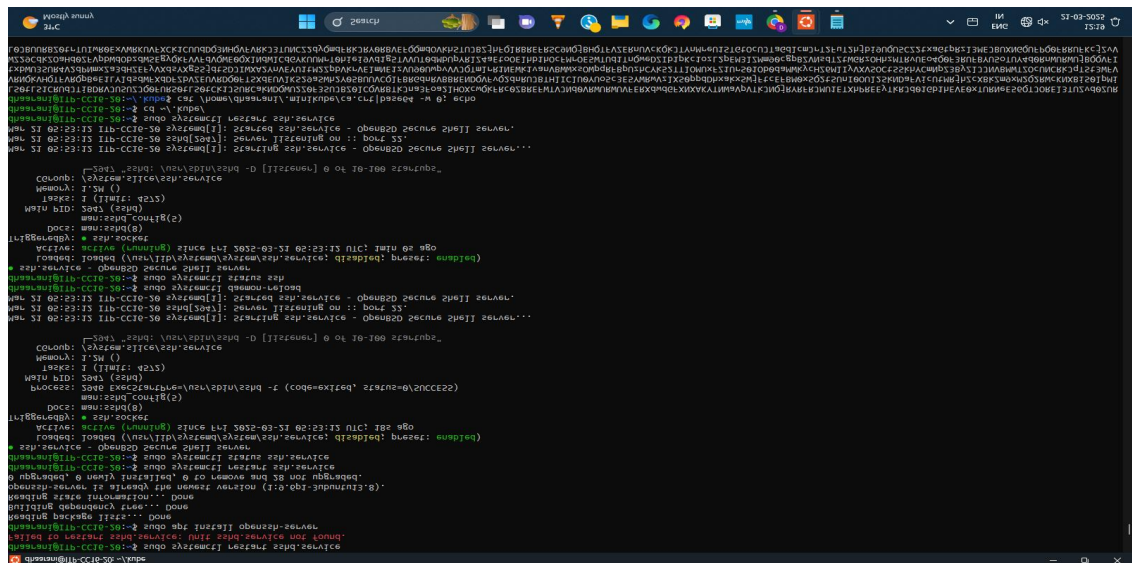


DEVOPS-DAY-5

JAVA APPLICATION DEPLOYMENT IN MINIKUBE



DEPLOYMENT.YML:

apiVersion: apps/v1

kind: Deployment

metadata:

name: my-deploy

labels:

apptype: web-backend # Ensure this matches Service selector

spec:

replicas: 4

selector:

matchLabels:

apptype: web-backend # Ensure this matches Service selector

strategy:

type: RollingUpdate

template:

metadata:

labels:

apptype: web-backend # Ensure this matches Service selector

spec:

containers:

- name: my-app

image: dhaarani15/simplewebapp:2

ports:

- containerPort: 7070

```
apiVersion: v1

kind: Service

metadata:

  name: my-service

  labels:

    apptype: web-backend # Make labels consistent

spec:

  type: NodePort

  ports:

    - targetPort: 8080

      port: 7070

      nodePort: 30002

  selector:

    apptype: web-backend
```

PIPELINE SCRIPT:

```
pipeline {
  agent any

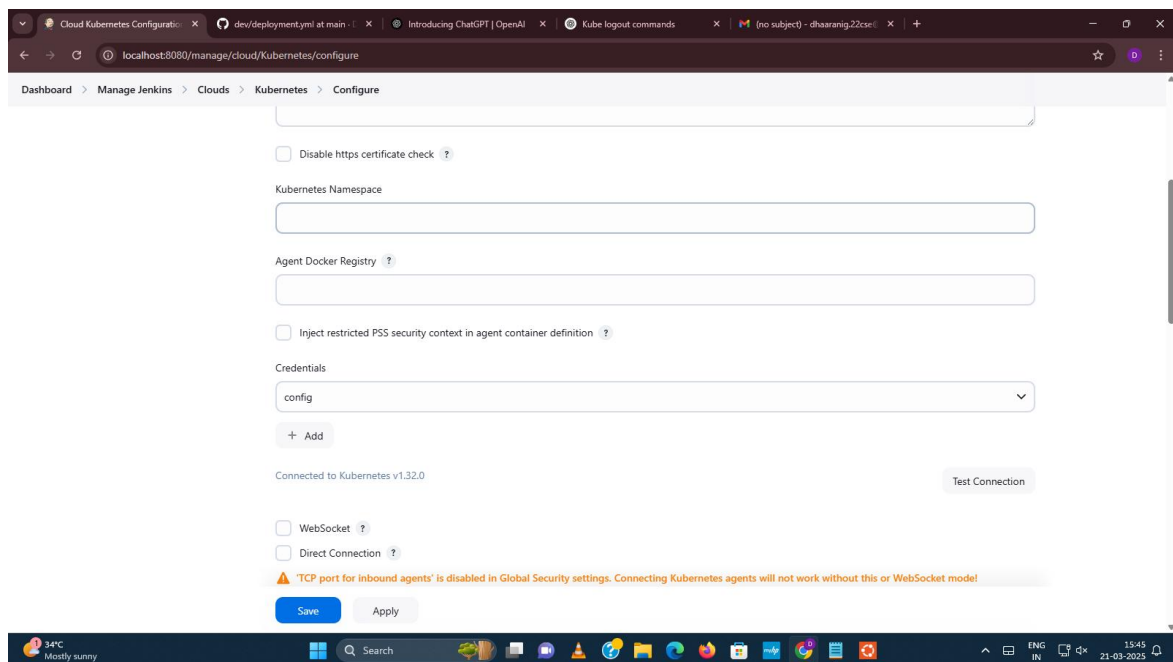
  stages {
    stage('scm') {
      steps {
        git branch: 'main', url: 'https://github.com/DHAARANIGANESAN/dev.git'
      }
    }
    stage('build') {
      steps {
        sh "mvn clean"
        sh "mvn install"
      }
    }
  }
  stage('build to images') {
    steps {
      script{
```

```

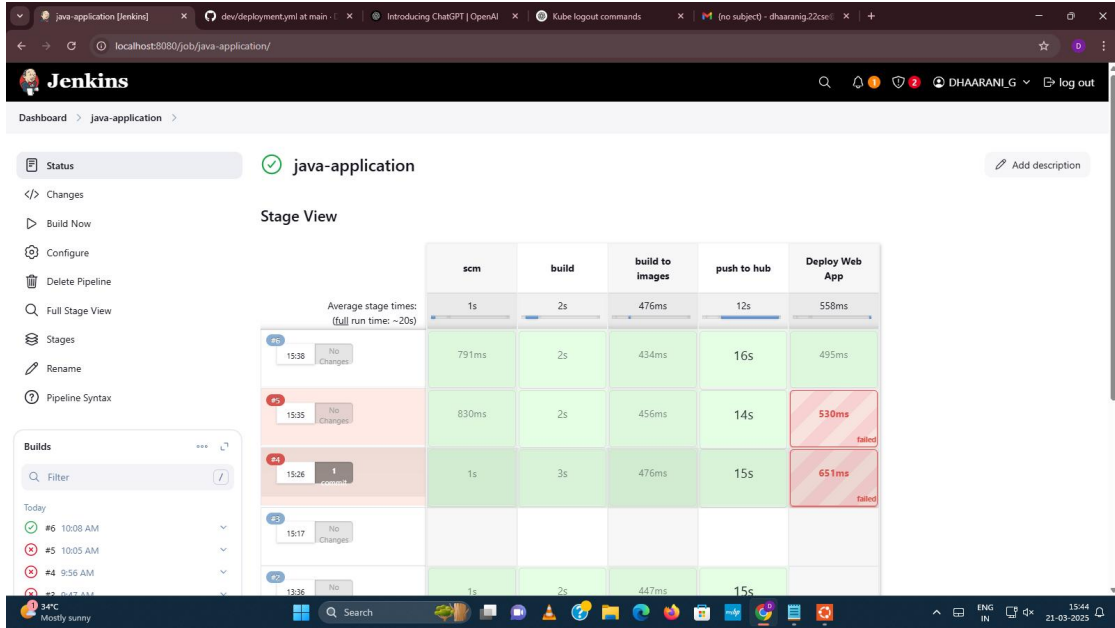
        sh 'docker build -t dhaarani15/simplewebapp:2 .'
    }
}
}
stage('push to hub') {
    steps {
        script{
            withDockerRegistry(credentialsId: 'Docker_cred', url:
'https://index.docker.io/v1/') {
                sh 'docker push dhaarani15/simplewebapp:2'
            }
        }
    }
}
stage('Deploy Web App') {
    steps {
        withKubeConfig(caCertificate: "", clusterName: 'minikube', contextName:
'minikube', credentialsId: 'KUBE', namespace: "", restrictKubeConfigAccess: false,
serverUrl: 'https://192.168.39.226:8443') {
            sh 'kubectl apply -f deployment.yml --validate=false'
        }
    }
}
}
}
}

```

CLOUD TESTED:



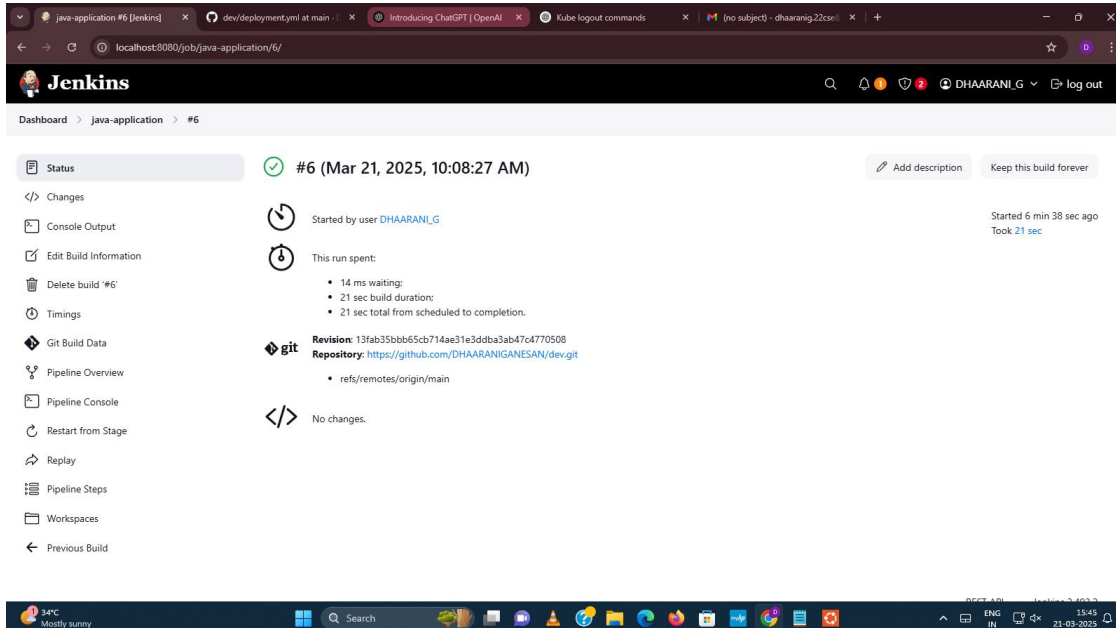
STAGE VIEW:



The screenshot shows the Jenkins Stage View for a pipeline named 'java-application'. The interface includes a sidebar with navigation options like Status, Changes, Build Now, Configure, Delete Pipeline, Full Stage View, Stages, Rename, and Pipeline Syntax. The main area displays a grid of stages: scm, build, build to images, push to hub, and Deploy Web App. Each stage has a duration and a status (green for success, red for failure). The 'Deploy Web App' stage is marked as failed for builds #4 and #5.

	scm	build	build to images	push to hub	Deploy Web App
Average stage times: (full run time: ~20s)	1s	2s	476ms	12s	558ms
#6 15:38 No Changes	791ms	2s	434ms	16s	495ms
#5 15:35 No Changes	830ms	2s	456ms	14s	530ms failed
#4 15:26 No Changes	1s	3s	476ms	15s	651ms failed
#3 15:17 No Changes					
#2 15:36 No Changes	1s	2s	447ms	15s	

BUILD SUCCESS:



The screenshot shows the Jenkins Build Success view for build #6. The interface includes a sidebar with navigation options like Status, Changes, Console Output, Edit Build Information, Delete build '#6', Timings, Git Build Data, Pipeline Overview, Pipeline Console, Restart from Stage, Replay, Pipeline Steps, Workspaces, and Previous Build. The main area displays the build status as 'Success' and provides details about the build, including the user (DHAARANI_G), the repository (https://github.com/DHAARANIGANESAN/dev.git), and the revision (13fab35bbb65cb714ae31e3d8ba3ab47c4770508).

#6 (Mar 21, 2025, 10:08:27 AM)

Started by user DHAARANI_G

This run spent:

- 14 ms waiting
- 21 sec build duration
- 21 sec total from scheduled to completion.


git Revision: 13fab35bbb65cb714ae31e3d8ba3ab47c4770508
Repository: <https://github.com/DHAARANIGANESAN/dev.git>
refs/remotes/origin/main

No changes.

CREDENTIAL:


System » Global credentials (unrestricted) » dev/deployment.yml at main » Introducing ChatGPT | OpenAI » Kube logout commands » (no subject) - dhaaranig-22csc


localhost:8080/manage/credentials/store/system/domain/_/credential/KUBE/


**Jenkins**

log out

Dashboard » Manage Jenkins » Credentials » System » Global credentials (unrestricted) » config

 Update

 Delete


 Move

config


Usage


This credential has been recorded as used in the following places:

Note: usage tracking requires the cooperation of plugins and consequently may not track every use.

[java-application](#)  #6

REST API Jenkins 2.492.2

 34°C Mostly sunny



ENG IN

18:46 21-03-2025